UNO-3072A
UNO-3074A

Intel® Atom™ D510 Automation Computer with 2 x PCI, 2 x GbE, and FireWire

Intel® Atom™ D510 Automation Computer with 4 x PCI, 2 x GbE, and FireWire

NEW

UNO-3072A
UNO-3074A

Windows Embedded · Compatible with Windows 7 · RoHS COMPLIANT 2002/65/EC · CCC · CE · FCC · c(UL)us LISTED E180881 I.T.E.

Features

- Onboard Intel Atom D510 1.66GHz processor
- Dual IEEE-1394 for vision inspection devices
- AT/ATX power mode by jumper selection
- Onboard 512KB Battery- backup SRAM
- Two RS-232/422/485 ports with automatic flow control
- Two 10/100/1000 Base-T RJ-45 ports with teaming function support
- Up to four PCI expansions
- 4-ch isolated DI, 4-ch isolated DO
- Dual SSD/HDD with onboard RAID 0/1 support
- Fanless design with no internal cables
- Isolation between chassis and power ground
- Front-accessible I/O design
- One internal USB for dongle and flash drive

Introduction

UNO-3072A and UNO-3074A are Dual Core Atom-based Embedded Automation Computers with up to four PCI slots that provide an excellent performance to power consumption ratio. They are also equipped with two IEEE 1394b bilingual interfaces which allow users to connect their own devices for machine vision. Critical data can be saved on the battery backup SRAM. They also support two HDD bays with RAID 0/1. The design with an open platform can fulfill demanding requirements from the industrial field, especially for machine vision or motion controllers.

Specifications

General

Certifications	CE, FCC class A, UL, CCC
Dimensions (W x H x D)	UNO-3072A: 140 x 238 x 177 mm (5.5"x 9.3"x 7") UNO-3074A: 181 x 238 x 177 mm (7.5"x 9.3"x 7")
Enclosure	Aluminum + SECC
Mounting	Wallmount, Stand, Panel
Industrial Grounding	Isolation between chassis and power ground
Power Consumption	25 W (Typical, no add-on card)
Power Requirement	9 ~ 36 V_{DC} (e.g +24 V @ 3A), ATX, AT/ATX power Jumper selection and BIOS AT simulation (support system reboot automatically after power recovery)
Weight	UNO-3072A: 4.5 kg / UNO-3074A: 5.0 kg
OS Support	WES, Windows XP Embedded, Windows Vista/XP, Windows 7, Windows CE 6.0, Linux, QNX
System Design	Fanless with no internal cabling
Remote Management	Built-in Advantech DiagAnywhere agent on Windows CE/XPe

System Hardware

CPU	Intel Atom D510 1.66GHz
Memory	2GB DDRII SDRAM built-in
Battery Backup SRAM	512 KB
Expansion Slots	UNO-3072A: Two PCI V2.2 slots UNO-3074A: Four PCI V2.2 slots
PCI Slot Power	12 V @ 3 A, -12 V @ 0.8 A, +5 V @ 6 A, +3.3 V @ 6 A (total combined power consumption on the PCI slots should be less than 40W)
Indicators	LEDs for Power, Standby, HDD, SRAM battery, Rx/Tx for COM ports
Audio	AC 97, Line Out

Storage	CF: 1x internal type I/ II CompactFlash slot
	        1x external type I/ II CompactFlash slot
	HDD: Two built-in 2.5" SATA HDD brackets with support for RAID 0 and RAID 1
	        One external SATA 2.0 (does not support hot swap)

Display	DB15 VGA connector, 1600 x 1200 @ 85 Hz
Watchdog Timer	Programmable 256 level timer interval, from 1~255 sec

I/O Interface

LAN	2 x 10/100/1000 Base-T RJ-45 ports (Intel 82574L, supports Wake on LAN, Teaming, built-in boot ROM, and IEEE1588 hardware support)
Serial Ports	2 × RS-232/422/485 with DB9 connectors, automatic RS-485 data flow control, 2 x RS-232 (optional)

Serial Speed	RS-232 Speed: 50 bps ~ 115.2 kbps, RS-422/485 Speed: 300 bps ~ 921.6 kbps (Max)
USB Ports	5 x USB 2.0 (one internal), 2 x USB 2.0 pin header
IEEE 1394 (Firewire)	2 x type B (Bilingual)
Optional I/O	PS/2 KB/MS, 2 x COM-232 (with packing), 2 x USB 2.0, LPT
Digital Input	4-ch. contact DI0 ~ DI3
Wet contact:	Logic 0: -3 ~ 3 V_{DC}; Logic 1: ±10 ~ 50 V_{DC}
Dry contact:	Logic 0: open; Logic 1: close to GND
isolation and ESD protect	1500 V_{DC}, 50~70 V_{DC} over voltage protection
Opto-Isolator Response:	25µs- Interrupt capable channel: DI0 ~ DI3
Digital Output	4 ch. DO0 ~ DO3 1,500 V_{DC} isolation, 200 mA max/channel sink current Keeps output status after system hot reset Open collector to 40V (200mA maximum sink current load) and 3 kHz speed

Timer/Counter

Counter Source	DI1 & DI3
Pulse Output	DO2 & DO3
Can be cascaded as one 32-bit counter/timer	
Down counting, preset counting value	
Timer Time Base	100 kHz, 10 kHz, 1 kHz, 100 Hz

Environment

Operating Temperature	(IEC 60068-2-2, 100% CPU/ I/O loading) -10 ~ 60° C (14 ~ 140° F)
Storage Temperature	-20 ~ 80° C (-4 ~ 176° F)
Humidity	95% @ 40° C (non-condensing)
Shock Protection	IEC 60068-2-27 CompactFlash: 50 G @ wall mount, half sine, 11 ms HDD: 20 G @ wall mount, half sine, 11 ms
Vibration Protection	IEC 60068-2-64 (Random 1 Oct./min, 1hr/axis.) CompactFlash®: 2 Grms @ 5 ~ 500 Hz, HDD: 1 Grms @ 5 ~ 500 Hz

Ordering Information

UNO-3072A-A33E	Atom 1.66GHz, 2 x PCI Automation Computer
UNO-3074A-A33E	Atom 1.66GHz, 4 x PCI Automation Computer

Accessories

PCLS-DIAGAW10	Advantech Remote Monitoring & Diagnosis Utility
1960048293N000	Top cover of UNO-3082 with venting hole
1960045707N010	Top cover of UNO-3084 with venting hole
9663308401E	USB x 2 for UNO 3000 Series
9663308402E	LPT x 1 for UNO 3000 Series
9663308403E	RS232 COM port x 2 and PS2 x 1 for UNO 3000 Series